## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

 (Currently amended) A method for diagnosing leukemia, pre-leukemia or aleukemic malignant blood diseases wherein stem cell growth factor (SCGF) in an in-vivo sample is quantified, wherein the method comprises:

obtaining an in-vivo patient sample from a patient suspected of having leukemia.

pre-leukemia or aleukemic malignant blood disease;

contacting the patient sample with one or more anti-SCGF antibodies;

detecting and/or quantifying SCGF present in the patient sample in an immunological assay; thereby obtaining a patient sample SCGF value;

comparing the patient sample SCGF value to a SCGF cut-off value;

wherein the SCGF cut-off value is set based on one or more individuals that do not have leukemia, pre-leukemia, or aleukemic malignant blood disease; and

diagnosing leukemia, pre-leukemia or aleukemic malignant blood disease if the patient sample SCGF value is above the SCGF cut-off value.

- 2 6. (Canceled)
- 7. (Currently amended) The method according to claim [[6]] <u>1</u>, wherein the immunological assay is a sandwich assay.
- 8. (Currently amended) The method according to claim 7, wherein two kinds of different anti-SCGF antibodies reacting with different epitopes of stem cell growth factor (SCGF) are used in the sandwich assay, wherein the two different anti-SCGF antibodies react with different epitopes of stem cell growth factor (SCGF).

- (Original) The method according to claim 8, wherein the antibodies are selected from polyclonal and monoclonal antibodies.
- 10. (Currently amended) The method according to claim 9, wherein at least one of the antibodies is a monoclonal antibody, and wherein the at least one monoclonal antibodies are antibody is selected from the group consisting of a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 6-28 aminoacids of SEQ, ID No. 1, a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 29-59 amino-acids of SEQ. ID No. 1, and a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 60-302 amino acids of SEQ, ID No. 1, all in the amino acid sequence of SEQ, ID No. 1.
- 11 20. (Canceled)
- 21. (New) The method of claim 1, wherein the SCGF cut-off value is set by obtaining one or more in-vivo normal samples from one or more individuals that do not have leukemia, pre-leukemia, or aleukemic malignant blood disease; contacting the one or more normal samples with one or more anti-SCGF antibodies; detecting and/or quantifying SCGF present in the one or more normal samples in an immunological assay; thereby obtaining one or more normal sample SCGF values; and
  - setting the SCGF cut-off value based on the one or more normal sample SCGF values.
- 22. (New) The method of claim 1, wherein the in-vivo sample is selected from blood, urine, spinal fluid, and puncture fluid.

- 23. (New) The method claim 22, wherein the in-vivo sample is blood, and the blood is selected from whole blood, plasma, and serum.
- 24. (New) The method of claim 1, wherein the SCGF cut-off value is 18.2 ng/ml.
- 25. (New) The method of claim 1, wherein the SCGF cut-off value is 15.0 ng/ml.
- 26. (New) The method of claim 1, wherein the SCGF cut-off value is 13.0 ng/ml.
- 27. (New) The method of claim 10, wherein the at least one monoclonal antibody is a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 6-28 of SEQ. ID No. 1, wherein the monoclonal antibody is KM2142 produced by hybridoma FERM BP-7922.
- 28. (New) The method of claim 10, wherein the at least one monoclonal antibody is a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 29-59 of SEQ. ID No. 1, wherein the monoclonal antibody is KM2804 produced by hybridoma FERM BP-7923.
- 29. (New) The method of claim 10, wherein the at least one monoclonal antibody is a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 60-302 of SEQ. ID No. 1, wherein the monoclonal antibody is KM2945 produced by hybridoma FERM BP-7924.
- 30. (New) The method of claim 1, wherein the patient is suspected of having leukemia.
- 31. (New) The method of claim 30, wherein the leukemia is acute lymphocytic leukemia (ALL).
- 32. (New) The method of claim 30, wherein the leukemia is acute myeloid leukemia (AML).
- 33. (New) The method of claim 30, wherein the leukemia is chronic myeloid leukemia (CML).

- 34. (New) The method of claim 1, wherein the patient is suspected of having pre-leukemia.
- 35. (New) The method of claim 34, wherein the pre-leukemia is myelodysplastic syndrome (MDS).
- 36. (New) The method of claim 1, wherein the patient is suspected of having an aleukemic malignant blood disease.
- 37. (New) The method claim 36, wherein the aleukemic malignant blood disease is lymphoma.
- 38. (New) The method of claim 37, wherein the lymphoma is Hodgkin's lymphoma.
- 39. (New) The method of claim 37, wherein the lymphoma is non-Hodgkin's lymphoma (NHL).
- 40. (New) The method claim 36, wherein the aleukemic malignant blood disease is myeloma.
- 41. (New) The method of claim 40, wherein the myeloma is multiple myeloma (MM).